27P. Evaluating Quality of International Distance Education

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Abstract
In this paper, quality is examined from three dimensions design, conformance, and performance. However, the primary focus is on the performance quality of distance education. Previous works have mostly focused on the design and conformance quality. This research is proposing that the true measure of distance education or e-learning should be on the performance quality. This is more important if the distance learning is global in nature. One key finding from the pilot study reveals that local application of the knowledge gained from distance education is the key to career advancement.

Keywords
Distance education, Performance quality.

1. Introduction
Quality has many definitions: conformance to requirements, fitness for use, meeting and/or exceeding customers' expectations (Crosby, 1979 and Juran 1988). Each definition has strengths and weaknesses with respect to measurement, generalization, managerial usefulness and consumer relevance, therefore each is appropriate under specific circumstances. Several authors have pointed out that what is needed is a framework that combines many of these dimensions (Wang and Strong, 1996; Grant 1999; Adelakun, 1999 and Widrick, et al. 2002). In this paper the quality framework by Widrick et al. (2002) and Grant et al. (1999) is adopted. The application of quality measurement (QM) principles to solve industry-related problems has been institutionalized at many firms, such as Xerox and academic institutions like the Rochester Institute of Technology, to gain competitive advantage Widrick et al. (2002). This paper would like to understand and explain how the quality of distance education can be evaluated. The focus is on the performance quality of distance education or e-learning. One important outcome of any learning process is the knowledge gained. Performance quality is about assessing how knowledge is applied in work place environment regardless to how the education is delivered.

2. Quality Framework
Figure 1 suggests that the quality management framework (QMF) cycle begins with the design phase followed by a conformance stage and concludes with the performance stage.
Theoretically quality process has no start or end point because of its continuous improvement notion. Like all processes there is a starting point which is assumed to be the design stage in this framework.

Widrick et al. (2000) pointed out that the quality of design has to do with how well the design captures the intended requirements. Conformance quality compliments the design quality and it describes how well firms and their suppliers conform to the design requirements (Crosby, 1979). Tangible, quantifiable, aspect of distance education, for example, technical resources (speed of the network, percentage of down time, number of people supported online at a time), is easy to measure. The challenge is measuring the quality of performance. Widrick et al. (2002) explain that quality of performance deals with how well a service or product performs in the eyes of the consumer who could be internal or external.

Performance quality is one area of assessment that is often not measured in distance learning. Performance quality in distance education is explained as how the product (students) performance in their local environment (on job/task). In this paper the employers are defined as the end customer not the students. The students are the product of the distance education. Therefore our goal in this paper is to evaluate how the product (distance students) performance in its local work place.

3. Application of the Framework: Measurement Parameters and Tools:
Grant et al. (1999) and Ensby, et al. (1997) suggested that the student is the product of higher education institutions and the employer is the customer. In contrast, Kanji et al. (1998) suggested that university program artifacts such as curriculum, courses, projects, and so on are the products and students are the customers. Grant et al. (1999) suggest that university faculties and administrators should listen to the concerns of employers who are the true customers and take them into consideration when designing courses for students who are the
product. This paper adopted the view by Grant et al. (1999). This view served as a guide to identify several measurement parameters and tools that could be applied to distance learning (see table 1).

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<th>Framework</th>
<th>Measurable parameters</th>
<th>Measurable tools</th>
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<td>Survey of voice of customer (employers)</td>
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<td>Online resources and technical skill to deliver distance education content</td>
<td>Identify offsite stakeholders at various levels.</td>
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<td></td>
<td>What program will be included in the distance education</td>
<td>Interview and meeting plan with stakeholders at offsite location about online resources</td>
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<td>Admission requirements</td>
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<td>Continues training for technical staff</td>
<td>Identify and plan for administrative resources at the local site</td>
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<td>Knowledge and skill requirements of the distance education locations</td>
<td>Survey and Plan of capable instructors for the distance program.</td>
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<td>Cultural and environment understanding of global delivery</td>
<td>Distance learning (DL) program committee</td>
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<td>Quality of Conformance of</td>
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<td>Level of courses coverage in the onsite program and the distance learning program.</td>
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<td>Are courses offered in proper sequence in both program</td>
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<td>Alumni positions and compensation over their career cycle.</td>
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<td>Returning alumni for continues education and career development.</td>
<td>New students from the employers</td>
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</table>

Table 1: measurable parameters and tools

4. Case Study
This case identifies design, conformance and performance quality in a distance education delivery between two universities, one in Chicago, IL, USA and the other in Nowy Sancz, Poland. The author spent six weeks in Nowy Sancz, Poland teaching and interviewing various stakeholders involved in the distance education partnership with the university in Chicago. Altogether twenty people were involved in the interview process including students and one employer.
4.1 Applying the Quality Framework

Based on Grant et al. (1999), figure 1, the design quality focused on planning and defining the key requirements for the distance education. The university in Chicago already has distance learning students that are spread all over the United States. The design phase task is to determine the requirement for distance education in Poland. The design team is made up of faculty from the university in Chicago and the university in Poland. The team identified the market potential for the program, admission requirement, the immediate academic needs, which degree program is best for the distance education, and the technical resources required at each site (table 1). One important objective of the design phase is how the courses in Chicago will be delivered to Poland. The e-learning application used in Chicago was identified as the tool for delivering the distance education content. The e-learning application captures the entire classroom experience, including video, voice and everything written on the board.

Conformance to requirements (Crosby, 1979) is determined by how closely the design requirements are met. The author observed that the e-learning application was up and running in Poland. Students and instructors are able to login to the e-learning application successfully and all functionalities worked very well. Conformance was continuously monitored by soliciting feedback from students on the program, especially on course quality, and teaching effectiveness. Only the degree programs identified during the design phase are offered in the distance program. The Poland student and the Chicago student have exactly the same course material. The students are advised through the local staff in Poland to follow the recommended course sequence suggested in the design phase.

One area that is difficult to assess is the performance quality. Grant et al. (1999) and Ensby et al. (1997) noted that the performance quality is one area that is seldom measured. One reason why it is seldom assessed might be due to the difficult in evaluating it. To assess the performance quality secondary sources (Poland students) were interviewed. It was difficult to get access to the employers quickly. Several students completing the program are considering changing jobs and careers after acquiring the necessary knowledge made possible through the program. The only employer interviewed was an adjunct faculty at the university. He hand picked students from the program for his company. Therefore his views of the students’ performance in his company might be biased. The program in Poland doesn’t have any industrial advisory board member from the industry that I can interview.

5. Discussion/Conclusion

In this paper we have identified a set of measurement parameters and tools to evaluate the three dimensions of quality. The proposed framework should prove useful for higher education institutions considering distance learning education implementation and quality assessment.

Following Ensby et al. (1997) we can assume that the university’s final product are not the online infrastructure, course curriculum, and research projects but the students. The university in Chicago has a board of directors that are made up of industry IT executives. They should introduce a similar practice for the Poland campus. Board members in Poland can provide external review and feedback of the industry needs and thus tailor programs to meet the customer expectations. They should establish a Poland alumni association to provide
advice and input towards performance quality. While the US-Poland program has been very successful in its technical delivery, several lessons were learned.

One, there is a difference between distance learning within the US (Chicago-New York) and distance learning across national boundaries or continents. Some of the assumptions that work in the US certainly do not work globally. For example, an average student in Chicago campus has a PC or laptop with constant internet connection. This is not the case for many of the students in Poland.

Two, IT system that works well in one cultural environment, may not work in another environment (Ruohonen and Adelakun, 1997). That is, if Java programming is good for career advancement in Chicago, it does not mean it is good for career advancement everywhere, e.g. Poland. Therefore, performance measurements have to address how content are applied locally.

Three, traditionally there seems to be a gap between industry and academia in terms of what they considered to be important and current. Many universities are involving the industry experts in curriculum development. A good example of such partnership is the development of the MS degree in Manufacturing Management and Leadership at Rochester Institute of Technology, USA (Johnson et al., 1995). Such partnership fosters stronger ties between academia and industry. This type of partnership is considered more valuable for global distance education.

Four, administration of international distance learning is more challenging than distance learning within a country, for example within US. Time differences, language differences, religion, and social norms make it more difficult to administer international distance education. Permanent on site director was available at the Poland location. The director is a local person with a strong US academic background. Such local and global knowledge is critical to the success of international distance learning. If not for the local knowledge, cultural issues alone could derail successful implementation of any distance learning program.

Lastly, performance quality is one area that is seldom measured. The case study confirmed this notion. In many universities performance quality are assessed by measuring the number of students in a program and revenue from the program. We disagree with this method of performance assessment. Future performance measurement should include customers’ (employer) evaluation of the products’ (student) performance. This is the only way to maintain sustainable competitive advantage in the long run. Using TQM proposed by Widrick et al. (2002) performance issues could be used as a trigger for developing new design requirements and conformance assessments. Future research will survey alumni and industry participants in Poland on their assessment of the online product (the graduated students).

References


